UAB School of Public Health
Department of Epidemiology

PhD Degree Program

Student Handbook
2012 - 2013

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The department reserves the right to make changes deemed necessary.
Students will be notified of any changes.
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Epidemiology

Epidemiology is the study of the distribution and determinants of diseases in human populations. It is a fairly recent science; the first substantial epidemiologic studies were conducted in the 19th Century. Advances in vital statistics, computers, and epidemiologic methods have led to an explosion in epidemiologic research and practice.

Epidemiology played a central role in our understanding of the etiology of heart disease and lung cancer. Epidemiologic studies identified an infectious agent transmissible through intercourse, transfusions, and shared needle use as the most likely cause of AIDS. Epidemiologic methods led to the demonstration that genes play a role in the etiology of insulin dependent diabetes mellitus and rheumatoid arthritis; that nutrition plays a role in pellagra; and that fluoride and mutants streptococci play roles in dental caries. Epidemiology helped advance our knowledge of the health effects of chemicals and radiation. Epidemiologic methods demonstrated the efficacy of mammographic screening. Studies using epidemiologic methods demonstrated that pharmacologic treatment of asymptomatic hypertension could reduce total and cerebrovascular specific mortality.

Epidemiologic surveillance helps set priorities for diseases of public health importance. Surveillance identified the recent resurgence of tuberculosis. Epidemiologic methods are central to future health policy research, including outcomes research.

Epidemiology is relevant for the entire life span from preconception through old age. Epidemiologic foci include such diverse social issues as injuries, violence, drug abuse, and teenage pregnancy. The emergence of diseases such as Bird Flu, SARS, HIV/AIDS, Legionnaire’s disease, toxic shock syndrome, and the re-emergence of hantavirus and TB have highlighted the national and international shortage of qualified epidemiologists. The so-called chronic diseases, including cardiovascular disease, cancer, stroke and diabetes, continue to account for the majority of deaths each year in the United States and other western countries, demanding more intense epidemiologic study. Epidemiologists proficient in biostatistics are needed to develop and refine epidemiologic methodology.

Graduates of our program have found employment in academia, research organizations and foundations, industry, public and private health services delivery organizations, and international agencies. Over a dozen of our doctoral graduates have faculty positions. Some are at such distinguished institutions such as University of Pittsburgh, Bowman Grey School of Medicine, Wake Forrest
University, University of Tennessee, University of Alabama at Birmingham and Vanderbilt University. Abroad, alumni are employed at universities in Thailand, Norway, Italy, Pakistan, and China.

**Epidemiology at the UAB School of Public Health**

Epidemiology has been a central part of medicine and public health at UAB from the early 1970's. Our Epidemiology Program faculty has active research grants totaling over $10M for research in Alabama, the United States, and around the world. Areas of research include occupational hazards in the chemical industries, diabetes, cardiovascular disease, HIV/AIDS, systemic lupus, Alzheimer's Disease, human papillomavirus and immunosuppression, sexually transmitted disease prevention, cancer control, and the safety and effectiveness of pharmaceuticals.

Our faculty interact with key researchers and clinical units throughout the University, National Institutes of Health, Centers for Disease Control, and with international partners. The epidemiology faculty provide expert assistance and research consultation to the World AIDS Foundation; the Centers for Disease Control and Prevention, the Agency for Toxic Substances and Disease Registry, the National Institute of Occupational Safety and Health, the National Center for Health Statistics; the National Institutes of Health; the Alabama Departments of Public Health, Mental Health, and Education; multiple units within UAB including the Comprehensive Cancer Center, the Veterans Administration Hospital, the University Hospital, the Center for AIDS Research, the Center for Health Promotion, the Injury Control Research Center, the Center for Injury Sciences, the Sparkman Center for International Public Health Education, Gorgas Institute, and others. In addition, several faculty members participate on industry advisory panels for occupational safety in private industry.

Doctoral students may work with investigators in all the Schools and Centers throughout UAB. Students publish with faculty in such diverse disciplines as Obstetrics and Gynecology, Medicine, Pediatric Dentistry, Nursing, Optometry, Nutrition, Microbiology, and Virology.

**Our Vision**

Today’s health challenges are global, involving diseases that must be understood at the cellular level and addressed at the community level. These problems require the development of new interventions, the implementation of new models, and the emergence of new systems. They demand educated professionals, well versed in the multiple disciplines of public health, to forge the best solutions.

Located in the heart of the largest academic health center in the Southeast, the UAB School of Public Health is embracing these challenges in Alabama and around the world, building the next generation of bold professionals leading innovation in public health. Let us become your place of discovery and training.
We are a community of outstanding scholars and professionals leading innovation in public health and recognized for improving the health of the citizens of Alabama and the world.

**Our Mission**

To develop, teach and apply knowledge to promote health and prevent disease.

**Our Values**

- Respect for every individual
- Open and honest communications
- Positive, supportive behavior
- Celebration of individual diversity
- Teamwork
- Integrity
- Excellence in everything we do
- Making a difference

**EDUCATIONAL OBJECTIVES**

The goal of the Ph.D. program is to prepare exceptionally qualified individuals for a career of research and teaching in the field of epidemiology. Specific areas of concentration within the broader field of epidemiology are available. These include occupational epidemiology, infectious disease epidemiology, chronic disease epidemiology, epidemiologic methods, molecular epidemiology, pharmacoepidemiology and genetic epidemiology. The aim of the Ph.D. program is to provide students a firm background in epidemiology, biometry, and information management. Candidates who complete the program will master the skills required for conducting independent research in epidemiology. Students have the opportunity to obtain instruction in the basic sciences outside the School of Public Health. Students completing the Ph.D. program acquire specific research skills in epidemiology that are applicable to both basic science and public health research.

**PROGRAM REQUIREMENTS**

The Doctor of Philosophy (Ph.D.) is administered by the UAB Graduate School. The degree is granted in recognition of scholarly proficiency and distinctive achievement in a specific field of academic study.

The Director of the Epidemiology Ph.D. program is appointed by the Dean of the Graduate School in consultation with the Dean of the School of Public Health. Currently the Program Director is Dr. Paul Muntner. Program policy is established by Graduate School Faculty holding primary and secondary appointments in the Department of Epidemiology within the guidelines of and in compliance with the general rules and regulations of the Graduate School as well as the School of Public Health. Changes in academic policy in the School of Public Health are
generally initiated through the Educational Policy Committee (EPC). Decisions of the EPC are subject to approval by the School of Public Health Faculty.

**Residence requirements**

The usual minimal period in which the doctoral degree can be earned is three academic years of fulltime study, or longer if the student has periods of part-time enrollment. The nature of doctoral study requires close contact between the student and the faculty of the graduate program, and the individual investigation or other special work leading to the dissertation must be performed directly under the guidance and supervision of a full member of the UAB graduate faculty. Therefore, doctoral students should be in residence (enrolled) for three full semesters each year, including summers, during a three year period or collectively a minimum of nine semesters if the student has to take a leave of absence or stop out during the course of their doctoral education.

**Course requirements**

The doctoral student must successfully complete a program of advanced course work (both didactic and of an unstructured nature). Courses taken at other institutions and in other degree programs may be used to satisfy selected program requirements. Credits more than seven years old may be used to satisfy Graduate School degree requirements only with the approval of the Graduate Program Director and the Graduate School Dean. Requests for credit must be made in writing by the student. Doctoral students are required to register for at least three hours of graduate-level credit each term.

The student must have already taken as a masters student or enroll in all the following masters biostatistics and epidemiology courses or their equivalent.

<table>
<thead>
<tr>
<th><strong>Epidemiology</strong></th>
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<tbody>
<tr>
<td>EPI 610</td>
<td>Principles of Epidemiologic Research</td>
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<td>EPI 611</td>
<td>Issues in Epidemiologic Design and Analysis</td>
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<tr>
<td>EPI 625</td>
<td>Quantitative Methods in Epidemiology</td>
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<tr>
<td>EPI 626</td>
<td>Introduction to Data Analysis with SAS</td>
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<td>EPI 627</td>
<td>Data Analysis &amp; Presentation of Epidemiologic Studies</td>
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<th><strong>Biostatistics</strong></th>
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<tr>
<td>BST 611/612</td>
<td>BST 611. Intermediate Statistical Analysis I and II</td>
</tr>
<tr>
<td>BST 626</td>
<td>Data Management/Reporting with SAS</td>
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At least 24 credit hours must be earned in doctoral level didactic epidemiology courses or advanced biostatistics courses. Any biostatistics course beyond BST 621/622 except BST 626 (SAS) is considered an advanced biostatistics course. (BST 655 does NOT count towards this 24 credit hour requirement, but BST 665 does.)

The student must take all of the following doctoral courses (or equivalent credit).
**Department of Epidemiology**

**Didactic:**

EPI 710 The Analysis of Case-Control Studies  
EPI 720 The Analysis of Follow-up Studies  
EPI 703 Grant Proposal Writing

**Seminar and tutorial:**

EPI 790 Doctoral Seminar (3 times)  
EPI 798/799 Doctoral Directed Research/Dissertation Research (for at least 18 hours) (at least 3 hours must be EPI 799, which you cannot register for until after you have been admitted to candidacy)

At least one additional doctoral level elective epidemiology courses must be taken.

**Current elective doctoral level epidemiology courses:**  
EPI 708 Tropical Infectious Diseases  
EPI 712 Nutritional Epidemiology  
EPI 713 Cancer Epidemiology and Control  
EPI 721 HIV/AIDS and STDs  
EPI 730 Introduction to Human Population Genetics Theory  
EPI 731 Genetic Epidemiology  
EPI 781 Special Topics in Epidemiology  
EPI 788 Principles and Methods in Molecular Epidemiology

**Department of Biostatistics**

**Didactic:**

BST 621 Statistical Methods I  
BST 622 Statistical Methods II

At least two additional advanced level biostatistics courses must be taken. Although Survival Analysis (BST 665) is no longer a required course, it is highly recommended for all PhD students in the Department of Epidemiology.

**Selected advanced level biostatistics courses:**

BST 665 Survival Analysis  
BST 640 Nonparametric Methods  
BST 670 Sampling Methods  
BST 671 Meta-analysis  
BST 723 Theory of Linear Models  
BST 735 Advanced Inference
BST 740  Bayesian Analysis  
BST 750  Stochastic Modeling  
BST 760  Generalized Linear and Mixed Models  
BST 765  Advanced Computational Methods  
BST 775  Statistical Methods for Genetic Analysis I

At least one doctoral level course in an area of medicine or in one of the major areas of public health other than epidemiology and biostatistics must be taken. This may have been taken as part of the student’s master’s program.

Lastly, all students must take one course related to research ethics and scientific integrity. One such course is GRD 717, “Principles of Scientific Integrity”; another, HCO 670, “Social and Ethical Issues in Public Health.” (These courses do not count towards the required 24 credit hours of didactic course work.)

During the first year of PhD studies, all students are required to take EPI 710, EPI 720, BST 621 and BST 622. During the second year of coursework, students will be required to take the doctoral seminar each semester and EPI 703 Grant Proposal Writing. Students may take electives during the first two years in the program to complete the 24 hours of required didactic coursework.

**Miscellaneous course requirements**

Courses offered in other departments may count toward the 24 hours of required doctoral level didactic course work with permission of the advisor and the Program Director.

A student wishing to have a required course waived should seek the approval of his/her advisor and the course instructor. Even if the course is waived, the total number of credit hours required will remain unchanged.

Students are responsible for providing written documentation of any courses which have been waived or approval of courses from other departments. It should take students 2 years of full-time academic study (12-15 credit hours per term) to complete the Ph.D. degree course requirements.

To graduate a student must earn a minimum grade-point average of at least 3.0 on a 4.0 scale.

**Teaching assistantships**

All students must serve as teaching assistant (T.A.) for at least one (1) Department of Epidemiology course; they may serve as a teaching assistant for additional courses if they choose. The student is responsible for documenting completion of this requirement by obtaining a written statement and evaluation from the instructor of the course in which the student assisted. This form needs to be submitted via e-mail to the program director and Ms. Judy Baker (coordinator of
the PhD program). It is required that the student do some teaching in the course, including giving a lecture or teaching help sessions. The particular duties to be performed by the T.A. are to be negotiated between the student and course master. The Department of Epidemiology has a specific compensation algorithm for TA's. For policies related to teaching assistants, please contact the Program Coordinator.

**Ph.D. EXPECTATIONS**

<table>
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<td>• Admission to doctoral degree program</td>
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<td>• Selection of faculty advisor</td>
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<td>• Maintenance of good standing</td>
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<tr>
<td>• Registered every term for coursework</td>
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<tr>
<td>• Passing of comprehensive examination</td>
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<tr>
<td>• Appointment of committee</td>
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<tr>
<td>• Defend proposal to committee</td>
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<tr>
<td>• IRB approvals obtained</td>
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<tr>
<td>• Admission to candidacy - no later than two semesters before expected graduation</td>
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<tr>
<td>• Application for degree - no later than 3 weeks into the expected semester of graduation</td>
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<tr>
<td>• Production of preliminary version of dissertation</td>
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<td>• Final Defense of Dissertation - by specified deadline</td>
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<tr>
<td>• One copy of defended committee-approved version of dissertation to Graduate School Office - by specified deadline</td>
</tr>
<tr>
<td>• Two copies of final version of dissertation on white, 25% cotton, acid-free, watermarked paper to Graduate School</td>
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<tr>
<td>• Conferring of degree</td>
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**NOTICE:** Students who fail to submit a completed dissertation within one semester following the final examination (public defense) will be charged a degree completion fee each semester.

**Methodologic proficiency**

All epidemiology doctoral students are expected to be proficient in the design, conduct, analysis, and interpretation of epidemiologic studies. Students must be able to demonstrate this proficiency both in writing and verbally via the qualifying examination.

**Thesis**

In order to be an acceptable dissertation, the research proposed must be original and be capable of making an important contribution to the literature. The
A dissertation can either include original data collection and/or the analysis of secondary data sources. The development of new epidemiologic methods is also appropriate. Students whose dissertation involves secondary data analysis should be involved with primary data collection for an epidemiological study/investigation at some point during the matriculation in the PhD program.

The student is expected to demonstrate the following through the dissertation project:

1. Originality/creativity in developing a question relevant to epidemiology.
2. Competence in applying epidemiologic study designs.
3. The ability to analyze, interpret and present the findings of the study in a written document and public presentation.

To ensure dissertation acceptability the student, with his/her advisor, must submit a completed “Project Acceptability Form” to the Epidemiology Ph.D. Program Director. This form must be received 30 days prior to the oral qualifying exam. The Program Director and Department Chair will review the form. After reviewing the form and either approving or disapproving of the proposed project, the Program Director will forward the form to the Department Chair. If both the Ph.D. Program director and the Department Chair do not approve of the proposed project, the student must change dissertation projects. If either the Ph.D. Program director or the Department Chair does not approve the summary draft of the research proposal, and the student and advisor believe that the proposal is an acceptable dissertation project, the proposal will be presented to the epidemiology faculty for approval. The student must obtain written approval of his/her proposed project at least two weeks before giving an oral presentation of the proposal (oral qualifying examination discussed on pages 12-13); the student is advised to obtain approval the semester before giving his/her oral presentation. The Doctoral Dissertation Committee (next page) has final approval of the full proposal.

**Doctoral Dissertation Committee Selection**

A dissertation committee should be selected as soon as the student and academic advisor have agreed on the dissertation research, although the committee cannot be formally approved until the written exam is passed.

**The research advisor in consultation with the student shall identify and request the members to serve on this committee.** Committee recommendations must be approved by the Program Director and the Dean of the Graduate School by means of a memorandum. The “Graduate Study Committee Letter” form is available via http://www.uab.edu/graduate/images/acrobat/forms/commit.pdf. The student should submit a completed form to the Program Director who will forward the memorandum to the Dean of the Graduate School.

The doctoral committee consists of the academic advisor as chair and at least four other individuals with graduate faculty status. At least two of the committee
members (including the advisor) must be full-time primary faculty members of the Epidemiology Program. At least two of the members of the Committee must be outside of the Epidemiology Program Faculty. Each of these members should bring relevant insight and expertise to guide the student. At least one of the committee members must hold a primary appointment outside the School of Public Health. The Epidemiology PhD Program Director, the Department Chair, and the Graduate School Dean will serve ex officio on the committee.

A candidate may request a change in academic advisors or committee members. However, they may do so only with the approval of the Epidemiology Program Director and the Dean of the Graduate School. If a faculty member is dropped from a committee the doctoral student is responsible for writing a memorandum thanking him or her for the time and effort spent on the committee. The required form “Adjustment to Committee” is online at http://www.soph.uab.edu/students/studentforms.

Students should be aware that many UAB faculty, especially those in the Medical School are not members of the Graduate School. They can be on the Committee only if approved by the Graduate School. This often requires additional material (usually the faculty member’s CV) be sent to the Graduate School for review and approval.

QUALIFYING EXAMINATIONS

The student must pass a written and an oral qualifying examination in order to advance to candidacy. The written examination contains two parts. The first part is taken after the first year of coursework and the second part is taken after the second year of coursework. Each section of the written examination must be successfully completed before the oral examination can be scheduled. The first part of the written examination will test the student’s general knowledge of epidemiology and biostatistics concepts and methods. The second part of the written examination will be integrative and will include the critique of epidemiology studies (e.g., article and grant review) and the analysis of data and drafting of a manuscript. The written examination will be compiled by a Chief Examiner and approved by the Doctoral Committee. The responses to each question will be evaluated by the Doctoral Committee, with grades compiled by the Chief Examiner. Students must register for at least three hours of graduate work during the term in which the written and oral examinations are taken.

Written Qualifying Examination
(The precise format may change.)

The written qualifying exam consists of two sections, Epidemiology and Biostatistics. As stated above, the written qualifying exam contains two parts.

Part 1 Exam.
The part 1 of the examination will be administered following the summer semester. **All students are expected to take part 1 of the examination following their first year in the PhD program.** This examination will be in class, closed book and will consist of short and long qualitative and quantitative questions. Topics to be covered include epidemiology and biostatistics concepts and application.

**Part 2 Exam**

The second part of the written qualifying exam include the critique of epidemiologic paper(s) and analysis of a data set and written presentation of results. Part 2 of the Exam will be take-home and open book. The student has up to 10 days to complete the second part of the written examination.

Students will be required to achieve a score ≥ 70 in order to pass the examination. A student who fails the examination (part 1 or part 2) will be permitted to re-take the examination one time. A second failure will result in the student’s dismissal from the program. A student must pass Part 1 of examination before entering the second year of coursework. Furthermore, students will not be permitted to take Parts 1 and 2 of the written qualifying examination in the same year.

The exam will be given no more than once each year. Once the examination has been graded, the Chief Examiner will notify the student of the results by way of a memorandum. Students dismissed from the program have the right to appeal this decision to the Dean of the Graduate School.

**Oral Qualifying Examination**  
(Formal presentation of research proposal)

Once the written examination is passed (both sections), the student must prepare a formal document detailing the proposed dissertation topic. Many students begin the process by providing potential committee members with a pre-proposal. The formal proposal document should include objectives, hypotheses, literature review, significance, study design, power analysis, analytical methods and strengths and limitations. This document is submitted to the doctoral dissertation committee. When the student is ready to formally present a research proposal to the doctoral dissertation committee, a memorandum and a copy of the proposal must be sent to each doctoral committee member at least 14 days prior to the scheduled meeting. Sometimes a pre-proposal (pre-oral) meeting of Committee members is held to iron out details. It is recommended that the student discuss with committee members their comments on a draft proposal before giving them the copy of the final proposal. The student is responsible for scheduling the Oral Qualifying Examination. It is not necessary to send a copy of the proposal to the Dean of the Graduate School or the Dean of the School of Public Health.

The oral examination tests the student’s specific knowledge of the area in epidemiology within which the student proposes to conduct dissertation research. The student is responsible for inviting all epidemiology faculty members, via
memorandum and/or email, to the student’s Presentation of Proposed Research at least 7 days in advance. In addition, notices should be put on the Departmental bulletin boards announcing the meeting and inviting others, including other students, to attend.

After the student’s presentation any of the audience members may question the student. After the non-committee members have completed their questioning, they (with the exception of interested Epidemiology Program faculty) will be asked to leave and the meeting will be closed, leaving the committee members who will begin the examination. This should be a challenging examination that delves into how well the student understands not only the proposed project itself, but the principles underlying its design and analysis, alternative designs and analysis, and any underlying biologic aspect of the project.

**Admission to Candidacy**

Only the members of the student’s dissertation committee will decide whether the student has performed adequately on the oral examination. The committee may decide to pass or fail the student. In the event the student fails, he/she may be invited to repeat the oral examination or may be asked to withdraw from the Ph.D. program. When the student passes the oral exam, he/she is admitted to candidacy and the committee completes the Application for “Admission to Candidacy Form”. This form is available via [http://www.uab.edu/graduate/online-forms/218-application-for-admission-to-candidacy-](http://www.uab.edu/graduate/online-forms/218-application-for-admission-to-candidacy-).

A student must be in good academic standing and apply for candidacy at least two semesters before expected graduation. No student may register for EPI 799 until they have been admitted to candidacy.

The formal thesis proposal approved by the doctoral committee at the end of the oral examination will serve to guide the student as to the expectations of the doctoral committee regarding the dissertation.

**Progress Meetings with Dissertation Committee**

Each doctoral student having an approved dissertation proposal is required to meet with his or her dissertation research committee each term during which he or she has enrolled for dissertation research credits. The student will schedule a 1-hour meeting on a day and at a time when the committee chair and at least two additional committee members are available to attend. Participation via conference call is permitted. At this meeting the student will present an agenda which shall include an update of the following: 1) progress made since the previous meeting; 2) preliminary data; 3) problems or obstacles that have arisen and their possible solutions; 4) ways in which committee members or other UAB faculty or staff could facilitate completion of the research or dissertation; 5) goals for progress in
the upcoming months.

Upon completion of the meeting, the student shall submit a summary report of the meeting to the Ph.D. program director within two weeks of the meeting. The essence of the report will be the “minutes” of the meeting. The report should include the date and time of the meeting and which committee members were present. The report can be written in outline format with bullets and submitted via email.

If the student fails to hold a meeting, or holds a meeting at which he/she fails to demonstrate progress or a clear plan for making progress, an Incomplete or Failing grade may be assigned for that academic term. The continuation of financial aid may be affected by such a grade. The advisor shall notify the Ph.D. program director if a student fails to hold a meeting, or if lack of progress is indicated at a meeting.

**Dissertation**

The dissertation must meet all the requirements of the University of Alabama at Birmingham Graduate School for doctoral-level dissertations. The Ph.D. thesis should follow the generally accepted format for doctoral theses, including an extensive introduction to the thesis topic which includes an updated literature review, a detailed materials and methods section, presentation of the results of the study, a brief discussion of these results, and specific conclusions. Each dissertation should include material equivalent to at least one manuscript which the doctoral committee considers suitable for publication in a nationally or internationally recognized journal.

The Epidemiology Program encourages a compilation of publishable papers with adequate literature review as a dissertation (i.e., paper-based approach). If a student writes a paper-based dissertation, the student is expected to be first author on all of the papers. Typically, the paper-based dissertation contains three papers, though the number of papers required for any specific project is at the discretion of the Doctoral Committee. The preprint/reprint option is intended for students who have related articles already published (reprint), accepted for publication, or under review (preprint).

**Public Defense**

A draft of the dissertation should be submitted to the doctoral committee before a final copy is prepared. For students preparing a non-traditional (paper-based) dissertation, the student should circulate the papers individually to committee members for their comments, rather than waiting until there is a draft of the complete dissertation. Doctoral committee members should provide the candidate with written comments and suggestions regarding each draft received. At least two weeks should be allowed for a faculty member to respond to any draft. The student should incorporate comments from all committee members into the dissertation.
Before scheduling a public defense of the dissertation, the student must obtain from each committee member a statement that the committee member has read the complete dissertation and gives their approval for a public defense. The student is to provide documentation of this approval to the Ph.D. program director. This approval does not necessarily indicate that the committee member is prepared to sign the “Dissertation Approval Form”. The approval may be contingent on revisions or a question may arise during the public defense that the committee wants addressed in the dissertation.

Final defense deadlines are published by the UAB Graduate School. The defense must be publicized in information sources available to the general University of Alabama at Birmingham community. **At least two weeks** before the defense a memo announcing the defense is to be sent to the committee members, the Epidemiology Program Faculty and the Graduate School Dean. The memo should be prepared by the student and sent by the doctoral research committee chair. **Also at least two weeks** before the defense the student is to prepare and distribute an announcement (for posting) of the defense to each department in the School.

The student is responsible for bringing two copies of the "**Dissertation Approval Form**" to the presentation. The forms may be obtained from the Graduate School. These forms are not available online for completion, but the Graduate School will prepare them for students who fill out and submit the **Approval Form Request** which is available online at [http://www.uab.edu/graduate/request-thesis-or-dissertation-approval-forms](http://www.uab.edu/graduate/request-thesis-or-dissertation-approval-forms).

All members of the doctoral committee should be present at the thesis defense although it can proceed with as few as four. Any of the audience members may question the candidate. It is at the discretion of the committee chair whether the committee will question the candidate at the same time as the other audience members, or whether there will be a closed session for only committee members and Epidemiology Faculty. When the questioning is finished, the doctoral committee will meet in private to decide whether or not the candidate has carried out a body of work and prepared a written document worthy of a Ph.D. in Epidemiology at the University of Alabama at Birmingham.

Two original copies of the Dissertation Approval Form will be signed by the research committee at the completion of a successful defense. The research committee chair is responsible for obtaining signatures. The doctoral committee may sign the thesis approval form immediately following the public defense, or require the candidate to make alterations in the document before signing. Once signed, the student is responsible for delivering these forms to the Graduate School along with the final version of the dissertation.

Once the entire doctoral committee has signed the final copy of the dissertation, copies must be submitted to the Graduate School as per regulations and rules of the University of Alabama at Birmingham Graduate School.² Within 10 days after the defense, the student should meet with the Graduate School staff to review
formatting and style requirements. Tips for preparation of dissertations are available online.

**Submission of the Dissertation**
No later than 2 weeks (10 business days) following the public defense, the completed, final version of the committee-approved dissertation must be submitted (as a single PDF) for final review. Also submitted online are the UAB Publication Agreement, Survey of Earned Doctorates, and Graduate School Exit Survey. One copy of the signed approval form is submitted to the Graduate School office. Additional information concerning completing graduation requirements and the dissertation submission and publication process is available online at [http://www.uab.edu/graduate/theses-and-dissertations-at-uab](http://www.uab.edu/graduate/theses-and-dissertations-at-uab).

Students are encouraged to work closely with the Graduate School in all phases of dissertation preparation. The Graduate School offers seminars and courses which have been helpful to other students. Questions for the Graduate School should be addressed to the Graduate School Records Office.
**Director**

Dr. Paul Muntner is currently the Director of the Ph.D. program in Epidemiology.

**Decisions about Acceptance**

All applicants are reviewed by Paul Muntner and the PhD Admissions Committee. In order to be accepted into the PhD program one faculty member must agree to advise and mentor the student.

**Appointment of an Academic Advisor**

Each student is assigned an advisor when the student is accepted into the program. Assignments are based primarily on the areas of interest of the student and the faculty member. The student may request a change of advisor any time after the student has matriculated and interacted with the various faculty members.

The academic advisor is a full-time primary faculty member of the Epidemiology Program. The advisor assists the student in selecting a course schedule during the first year of the student’s program. The original academic advisor helps the student select a doctoral dissertation committee. The academic advisor may be a temporary arrangement. The student and academic advisor should confer about initial course work, and on any special projects, based on the student’s previous experience, and the requirements of the graduate program.

1. **Change of Academic Advisor.** If it is necessary to change advisors, the student should obtain a "Change of Advisors Form" from the Office of Student and Academic Services. The change of advisor form can be found at [http://www.soph.uab.edu/students/studentforms](http://www.soph.uab.edu/students/studentforms). When the form is completed and appropriately signed, it should be returned to the Office of Student and Academic Services for processing.

2. **Research Advisor.** The research advisor is the Chair of the Student’s Dissertation Committee. This may be the student’s Academic Advisor or a new advisor. The procedure for changing to a different research advisor is the same as for the change of academic advisor.

**Registration**

Full time students typically register for 9 to 15 hours of course credit per semester. Part-time students generally enroll for 6 hours per semester. Students should meet with their assigned advisor prior to registration to review academic progress and discuss course work for the upcoming term. An advisor’s approval is necessary for registration completion. The student must have a registration-
permission hold lifted in the BlazerNet/Banner System prior to registration. This system requires students to directly contact their advisors prior to registering for courses. Once the advisor reviews the student’s academic plan for the term, the advisor notifies the appropriate person in the department (EPI Program Coordinator, Kimberly Hawkins in Room 217C, 975-9749) to issue the student a Registration Access Code or RAC number. A new RAC# is required to register for each academic term. Students will not be able to register without either written notification or direct communication from the advisor to release the RAC#.

Some courses may require the approval of the instructor and/or the Academic Dean. The UAB Class Schedule or BlazerNet will usually indicate when this is necessary. Students should pay particular attention to course-change updates found on the School of Public Health’s website under class schedule and on bulletin boards in the Ryals Building.

**Late Registration, Adding or Dropping a Course**

Students are expected to register during the normal registration period and only register for courses they intend to complete. Registering late and adding or dropping courses is possible, but only until the date specified in the UAB Class Schedule published each term.

Students who wish to add or drop a course must complete an add/drop form. Any change in registration, including dropping and adding courses, must be approved by the student’s advisor. In order to add and/or drop a course prior to the first day of classes, the student must complete an add/drop form and obtain the signature of the advisor. Students who wish to add courses after the first day of classes must have both the instructor’s signature and the advisor’s signature. The completed form, including all appropriate signatures, must be submitted to the Registrar’s Office for processing.

**Course Waiver**

A course waiver indicates that a course was completed at another institution or that the student had sufficient knowledge acquired from a similar course from another institution. In the case of "Core" courses, the core instructor must determine if the student can waive a course. Documentation regarding the waiver must be sent to the Office of Student and Academic Services. The deficit in credit hours due to course waivers must be made up by taking other courses, i.e., the total number of credits needed for graduation remains the same.

**Leave of Absence**

A leave of absence may be granted under special circumstances. Leaves of absence are generally granted for a one year period. Students who do not obtain prior written approval for a leave of absence but who fail to enroll for two consecutive semesters (excluding summer term) will be dropped as students in the SOPH. A student who is dropped for not requesting leave or for not returning to school
when the period of leave is expired, may obtain an expedited readmission upon recommendation of the Epidemiology Program faculty only if all supporting documentation is deemed adequate by the Program Director, and the student’s Epidemiology Program advisor.

Students who wish to return to school within five years from the drop date may do so under the following conditions: the student wishes to return to the same department, degree, and track he or she was in at the time of withdrawal from the program, the student completes an application for readmission form (obtain from Office of Student and Academic Services), and the student obtains the appropriate signatures of approval.

The student must still abide by the Graduate School requirement of completing a graduate degree program within seven years.

**Length of doctoral studies**

As mentioned previously, all full-time Ph.D. students should complete their course requirements within the second year of enrollment. Additionally students should complete their written and oral qualifying exams following their second year in the PhD program. The Graduate School imposes a 7-year limit to complete the doctoral degree. Any extension of the 7-year deadline must be approved, in writing, by the student’s advisor, the Epidemiology Program Director, the Chair of the Department of Epidemiology, and the Dean of the Graduate School. Extensions will not be granted without good cause. The most generally accepted reasons for extensions are health-related.

**Program Completion**

The candidate is responsible for meeting deadlines for graduation. Candidates must be in good academic standing prior to graduation, with no temporary grades, (I, N, or Q) on their transcripts. Graduation deadline dates are included in the *School of Public Health Academic Calendar* and the candidate must be recommended for the doctoral degree to the Graduate School Dean by the graduate study committee and the graduate program director. This recommendation must be received no later than 20 days before the end of the term in which the candidate is expected to complete all degree requirements. Students must be registered for at least three semester hours of graduate work in the semester during which degree requirements are completed.

**Application for Degree**

To begin the process, the candidate must submit the application for degree form to the Program Coordinator by the deadline date. Some of these requirements, along with a brief explanation, follow:

- **Application for Degree** is a form that must be completed by the candidate
and turned in to the Graduate School before the end of the second week of the semester of expected graduation. This form is available online [http://www.soph.uab.edu/students/studentforms](http://www.soph.uab.edu/students/studentforms). There is a $50 fee. If, for any reason, graduation does not take place as expected, then the student must fill out another application form and pay the diploma order fee.

- **Abstract of Dissertation** must be approved by the research committee chair and program director and submitted by the candidate on 100% ragbond paper to the Graduate School. **Survey of Earned Doctorates** is distributed by the Graduate School and is completed by the candidate.

- **Publishing Your Dissertation** Microfilm and copyright contract forms must be completed by the candidate. Other forms may be necessary and the student will be so notified. The graduating student is also requested to complete an anonymous “Exit Interview” questionnaire at this time.

**Award of degree**

Upon approval of the Graduate School Dean and payment of outstanding financial obligations to the university, the candidate will receive the degree of doctor of philosophy. Diplomas are issued at the end of each semester. Degrees are formally awarded at commencement exercises in December and June.

**SUMMARY OF PROCEDURES FOR EARNING THE PhD DEGREE**

- Project acceptability form (student to director to chair)
- Appointment of Graduate Study Committee (student to program director to grad dean)
- Oral Qualifying Examination [presentation of proposal]/Admission to Candidacy
- scheduling (student)
- memo inviting committee members at least 14 days prior (committee chair)
- notice to epidemiology faculty, via email or memorandum, and posting notices in department, both at least 7 days prior (student)
- student brings forms to examination
- department (program director) takes forms to graduate school
- Application for Degree (candidate)
- Defense of dissertation
- scheduling (student)
- approval to defend (student to committee [memo or email] to director)

at least 10-14 days prior

- post announcement in each department in school (program manager)
- publicize in UAB reporter (student)
- memo to committee, epidemiology faculty and grad school dean (student to chair who forwards)
- student brings forms to examination
• chair is responsible for obtaining signatures
• student delivers signed forms and dissertation to graduate school
• Provide Graduate School with one copy of the dissertation (candidate)
• Provide Graduate School with two originals of corrected (if necessary) dissertation on 100% ragbond paper (candidate)
• Provide Department with one copy of dissertation on 100% ragbond paper (candidate)
• Payment of appropriate fees (candidate)
• Turn in completed Survey of Earned Doctorate and Microfilm forms (candidate)
• Send Graduate School all final papers (department)

**FUNDING**

There are a variety of sources of funding for PhD students in Epidemiology. Currently the Program has a number of Graduate School fellowships. These fellowships generally provide a stipend (the amount of which varies over time) and full tuition. The fellowships are for one year. They can sometimes be renewed; however students are urged to seek their own support. Students should ask their advisor for assistance in this process. They may seek employment in an agency of funded project (often one which could lead to a dissertation topic) or their own grant funding.

In addition, Dr. Waterbor is co-Director of a grant which funds a number of Cancer Control Fellowships for students interested in Cancer Epidemiology research. They provide stipend, tuition, books and travel. These fellowships are often renewed annually. Contact Dr. Waterbor (h2obor@uab.edu) for further information.
**Revision of Policies**

The Faculty of the Epidemiology Program reserves the right to make revisions in policies at any time. However, when changes in requirements are made, current students will have the option of selecting the requirements under which they matriculated or the new policy.

**Doctoral Progress Review**

The Epidemiology Faculty, headed by the Program Director, review every doctoral student’s progress every year. Specifically, they are charged with the following:

- a) evaluating the progress of each student on a yearly basis.
- b) identifying students not making satisfactory progress.
- c) recommending actions to be taken for students not making satisfactory progress toward their degree.

**Student Questions and Problems**

If students have questions or problems, they are urged to address them first to their advisor. If the advisor is not available, the student may contact the Program Director’s office.

**Grievances and Appeals**

If a student has a grievance, it is recommended that the student discuss it with the individual with whom they have the grievance. If this is not appropriate or the student does not feel comfortable doing this, the sequence of persons to be approached are as follows: the faculty advisor, the Chairman, and, if necessary, the Dean of the Graduate School or the Dean for Academic Affairs of the School of Public Health (whichever is appropriate).

A detailed description of the student's rights and responsibilities are laid out in *Direction*, the UAB Graduate Student Handbook. This describes conduct and grievances as well as the procedures. The handbook is available at the UAB Graduate School. The School of Public Health has an Honor Code with which all students should be familiar. Copies of the Honor Code are distributed at orientation each fall; copies may be obtained from the Office of Student and Academic Services throughout the year.
Faculty

Affuso, Olivia, Assistant Professor, MS (Georgia State University), PhD (University of North Carolina at Chapel Hill); Research Interest – Applied epidemiology for the prevention of obesity and chronic disease through physical activity and nutrition, food security, health disparities, and design of obesity randomized controlled trials.

Aissani, Brahim, Research Assistant Professor, PhD, (University P. & M. Curie.Paris VI); Research Interest – Genetic epidemiology of infection, obesity.

Arnett, Donna, Professor and Chair, MSPH (Univ. of South Florida), PhD (Univ. of North Carolina Chapel Hill); Special interests: Cardiovascular genetic epidemiology.

Bray, Molly, Professor, MEd in Exercise Physiology (Univ. of Houston), PhD in Human and Molecular Genetics (University of Texas Graduate School of Biomedical Sciences); Research Interests: Molecular and genetic basis of obesity; genetic analysis of complex traits; gene-environment interaction; physical activity/exercise physiology; adipogenesis; genetics of response to obesity interventions

Brown, Elizabeth, Assistant Professor, PhD (Johns Hopkins University); Special interests include immunogenetics and molecular epidemiology.

Carson, April, Assistant Professor, MSPH in Epidemiology (Univ. of North Carolina at Chapel Hill), PhD in Epidemiology (Univ. of North Carolina at Chapel Hill; Research Interests: Health disparities in cardiovascular disease and diabetes

Chamot, Eric, Assistant Professor, MD, MSc (Switzerland), PhD (Tulane); Special interests: Screening, Viral hepatitis, HIV/AIDS, STD’s.

Cole, Philip, Professor Emeritus; MD (Vermont), DrPH (Harvard); Special interests: Cancer epidemiology, Occupational epidemiology.

Delzell, Elizabeth, Professor; MSPH (North Carolina), SD (Harvard); Special interests: Occupational epidemiology, pharmacoepidemiology, cancer epidemiology.

Griffin, Russell, Assistant Professor, MSPH in Epidemiology (Univ. of Alabama at Birmingham), PhD in Epidemiology (Univ. of Alabama at Birmingham)

Funkhouser, Ellen, Associate Professor; MS (Indiana), DrPH (UAB); Special interests: Epidemiologic methods, Cancer epidemiology.

Go, Rodney C. P., Professor Emeritus, PhD (Hawaii); Special interests: Population genetics, Genetic Epidemiology, Chronic Disease Epidemiology, Neuroepidemiology.
Howard, Virginia, Assistant Professor; MSPH (North Carolina), PhD (Medical Univ. of South Carolina Charleston); Research interests: Stroke symptoms and associated risk factors, life-course exposure to the stroke belt geographic region, and risk factors for outcomes following carotid endarterectomy and carotid stenting.

Irvin, Ryan, Assistant Professor, MS in Biostatistics (Medical Univ. of South Carolina, Charleston), PhD in Epidemiology (University of Alabama at Birmingham); Pharmacogenetics of antihypertensive treatment with a focus on genetic risk for incident diabetes mellitus due to thiazide diuretic treatment and treatment resistant hypertension.

Jolly, Pauline, Professor, PhD in Science Education (Louisiana State University), MPH and PhD in Immunology and Infectious Diseases (Johns Hopkins University); Special interests: HIV immunopathogenesis, STIs and other infectious diseases, Immune and health effects of aflatoxin.

Kaslow, Richard A., Professor Emeritus, MD (Harvard), MPH (Harvard); Special interests: Epidemiology of infectious and immune diseases, Genetic epidemiology.

Maetz, H. Michael, Professor Emeritus, VMD (Pennsylvania), MPH (Harvard); Special interests: Infectious disease epidemiology, Public health education.

Levitan, Emily, S.M. and Sc.D. in Epidemiology (Harvard School of Public Health); Research interests: the relationship between diet, lifestyle, and cardiovascular diseases and the application of epidemiologic and statistical methods to address public health questions

Mason, J. Walter, Professor Emeritus, MSHyg., DSc (Hyg.) (Tulane); Special interests: Water related diseases in developing countries and rural U.S.A.

McGwin, Gerald, Associate Professor, MS (Harvard), PhD (UAB); Special Interest: Injury Epidemiology, Epidemiologic Methods, Ophthalmic epidemiology.

Muntner, Paul, Professor, MHS (Johns Hopkins University), PhD (Johns Hopkins University); Special interests: Renal disease epidemiology, Cardiovascular epidemiology.

Perry, Rodney T., Research Assistant Professor, PhD (Univ. of Alabama at Birmingham); Special interests: Population and molecular genetics, Neuroepidemiology.

Roseman, Jeffrey M., Professor Emeritus, MD, PhD (Chicago), MPH (North Carolina); Special interests: Diabetes and Cardiovascular disease epidemiology, Injury epidemiology, Oral health epidemiology.

Sathiakumar, Nalini, Associate Professor, MD (Madras Medical College, India), MSPH (UAB), DrPH (Univ. of Alabama at Birmingham); Special interests: Environmental and occupational epidemiology, Pediatric epidemiology.
Shrestha, Sadeep, Assistant Professor, MHS in Infectious disease/Genetic Epidemiology (Johns Hopkins University), PhD in Genetic Epidemiology (Johns Hopkins University), MS (Biotechnology) from Kreiger School of Arts and Sciences, Johns Hopkins; Research interests: Studying the interplay of human genetics with behavioral and environmental factors in the natural history, pathogenesis and outcomes of HIV/AIDS and other infectious diseases

Waterbor, John W., Associate Professor, MS, MD (Pennsylvania), DrPH (Univ. of Alabama at Birmingham); Special interests: Cancer epidemiology and control, Injury epidemiology.

Wilson, Craig M., Professor, MD (University of Wisconsin), Director of the Sparkman Center for Global Health; Special Interests: Malaria, geographic medicines, pediatric infections disease.
APPENDIX
<table>
<thead>
<tr>
<th>Course Name</th>
<th>Term Course Available</th>
<th>Term/Year Taken</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BST 621: Statistical Methods I</td>
<td>X</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>BST 622: Statistical Methods II</td>
<td>X</td>
<td>Spr</td>
<td>3</td>
</tr>
<tr>
<td>EPI 703: Grant Proposal Writing</td>
<td>†</td>
<td>Sum</td>
<td>3</td>
</tr>
<tr>
<td>NEW COURSE: ADVANCED EPI METHODS (Starting Fall 2013)</td>
<td>X</td>
<td>Fall</td>
<td>3</td>
</tr>
<tr>
<td>EPI 710: Analysis of Case-Control Studies</td>
<td>X</td>
<td>Spr</td>
<td>3</td>
</tr>
<tr>
<td>EPI 720: Analysis of Follow-Up Studies</td>
<td>X</td>
<td>Sum</td>
<td>3</td>
</tr>
</tbody>
</table>

At least one (1) additional doctoral level epidemiology course - select from the following:

- EPI 708: Tropical Infectious Diseases
- EPI 712: Nutritional Epidemiology
- EPI 713: Cancer Epidemiology and Control
- EPI 721: HIV/AIDS and STDs
- EPI 720: Intro to Human Populaiton Genetics
- EPI 731: Genetic Epidemiology
- EPI 731L: Genetic Epidemiology Lab
- EPI 761: Special Topics in Epidemiology
- EPI 788: Principles & Methods in Molecular Epidemiology

At least two (2) advanced level biostatistics courses:

- BST 665: Survival Analysis
- BST 623: General Linear Models
- BST 640: Nonparametric Methods (offer on demand/as needed)
- BST 660: Applied Multivariate Analysis (offer on demand/as needed)
- BST 661: Structural Equation Modeling (offered on demand/as needed)
- BST 670: Sampling Methods (offered on demand by ≥5 students)
- BST 671: Meta Analysis (offered as needed)
- BST 723: Theory of Linear Models (Fall/odd years)
- BST 735: Advanced Inference (Spring/odd years)
- BST 740: Bayesian Analysis (Fall/even years)
- BST 750: Stochastic Modeling (offered as needed)
- BST 760: Generalized Linear and Mixed Models (Spring/even years)

At least one (1) doctoral course in an area of medicine or in one of the major areas of PH other than EPI and BST must be taken. The following courses are acceptable. Please consult your advisor for additional courses.

- ENH 722: Integrated Biomedical Science III
- HB 714: Survey Research Methods
- MCO 711: Child Health and Development
- PAT 700: Biology of Disease
- PAT 703: Intro to Pathology Research

Required Doctoral Seminars (Please note EPI 790 must be taken at least 3 times and EPI 797 must be taken at least 1 time):

- EPI 790: Doctoral Seminar in Epidemiology
- EPI 797: Doctoral Seminar in Research Ethics

Doctoral-Level Research (at least 24 hours):

- EPI 796: Doctoral-Level Directed Research (Register prior to admission to candidacy)
- EPI 799: Dissertation Research (Register after admission to candidacy) (Must have at least 12 hours and at least 2)

At least one (1) course related to research ethics and scientific integrity (Does not count toward the required 24 credit hours of didactic course work.)

- ORD 717: Principles of Scientific Integrity
- MCO 670: Social and Ethical Issues in Public Health

Electives (with advisor's approval and in some cases, also approval of instructor) - to complete total hours required for degree.

Minimum Total Credit Hours for Degree: 61

Student Signature/Date: Advisor Signature/Date:

Course Availability Key:
- † Indicates course taught every even calendar year
- # Indicates course taught every odd calendar year
- ‡ Indicates course may or may not be taught (check with the program manager for course availability)